Clinical Vignette

Pott's Disease in a Patient on Continuous Ambulatory Peritoneal Dialysis

Kim-Ming Wong, Wong-Kan Wong,[1] Wai-Leung Chak, Koon-Shing Choi, Ka-Foon Chau, Chun-Sang Li
Departments of Medicine and [1]Radiology and Imaging, Queen Elizabeth Hospital, Hong Kong.

A 31-year-old lady had end stage renal failure (ESRF) attributed to chronic glomerulonephritis in 1987. She was put on continuous ambulatory peritoneal dialysis (CAPD) for 3 years before she underwent cadaveric renal transplant in 1990. Her immunosuppressive therapy comprised prednisolone, azathioprine and cyclosporine. She reached ESRF again in 2000 due to chronic allograft nephropathy and was put back on CAPD.

She presented with a 6-month history of pain over her upper back region with increasing severity. She was otherwise well, with no fever or other constitutional upset. Physical examination revealed mild tenderness localized to the T7 to T9 vertebral levels. No abnormal neurologic signs were detected. Laboratory test results were as follows: hemoglobin 8 mg/dL, white cell count 10×10^9/L, platelet 430×10^9/ L, urea 12 mM, creatinine 590 μM, albumin 30 g/L, globulin 27 g/L, ALP 136 IU/L, total calcium 2.4 mM, phosphate 1.5 mM. Her serum C-reactive protein was elevated to 233 mg/L (normal < 5 mg/L). Lateral thoracic vertebral X-ray showed features of bone destruction at the T7 to T9 levels. Sagittal T1-weighted magnetic resonance imaging (MRI) after gadolinium contrast injection revealed destruction of the lower endplate of the T7 vertebra, the upper and lower endplates of the T8 vertebra, and the upper endplate of the T9 vertebra. T7/T8 and T8/T9 disc spaces were narrowed. Rim enhancing cystic masses suggestive of abscesses were noted in the anterior subligamentous area and in the spinal canal compressing the spinal cord (Panel A). A computerized tomography-guided biopsy of the abscess revealed acid-fast bacilli. The clinical presentation was compatible with tuberculous spondylitis. The patient was treated with antituberculous therapy including isoniazid, pyrazinamide, and rifampicin.

Tuberculosis is endemic in Hong Kong. Compared with the general population, immunocompromised patients show a higher incidence of extrapulmonary and disseminated disease [1]. Tuberculous spondylitis is the commonest musculoskeletal manifestation, accounting for 40% to 50% of cases [2]. It has potential serious complications, including permanent neurologic deficits and spinal deformity. Early treatment has been shown to improve long-term outcome. Therefore, tuberculous spondylitis should be high on the list of differential diagnoses of multiple destructive bone lesions. Clinical presentation can be atypical and, as in our patient, symptoms can be quite subtle. A high clinical suspicion is required for an early diagnosis to prevent delay in treatment.

Panel A

References

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2. Pertuiset E, Beaudreuil J, Liote F, Horusitzky A, Kemiche F, Richette P, et al. Spinal tuberculosis in adults. A study of 103 cases in a developed country, 1980-1994. *Medicine (Baltimore)* 1999;78:309–20.